

REMARKS

Reconsideration and allowance of this application are respectfully requested in light of the above amendments and the following remarks.

At the outset, the Applicants wish to thank the Examiner for the courtesy shown to their representative during a telephone interview on October 5, 2010. The participants were Examiner Guarino and Douglas Agopsowicz, Reg. No. 56,792. The following includes a summary of the substance of the interview. No agreement was reached.

During the interview, the discussion focused on the rejections of claims 1 and 10-12 made in the Office Action mailed July 26, 2010, and particularly on claim 1. The prior art reference U.S. 2002/0119781 to Li et al. (hereinafter, "Li") was discussed. The July 26, 2010 Office Action indicated that claims 1 and 10-12 were rejected under 35 U.S.C. §102(b) as being anticipated by Li, and further indicated that claims 6-9 are allowed and that claims 2-5 and 13-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 1, 3-5, 10, 11 and 14-16 have been amended, claim 17 has been added, and claims 2, 6-9 and 12-13 have been cancelled without prejudice or disclaimer. Amended claim 1 incorporates the features from allowable claim 2. Amended independent claim 10 incorporates the features from allowable claim 13. Claim 11 has been rewritten as an independent claim, and also incorporates the features of allowable claim 13. Claim 17 is newly added and is a method claim corresponding to amended independent apparatus claim 11.

During the telephone interview, the Applicants' representative proposed the above amendments to the Examiner, noting that the above amendments should place the application in

condition for allowance based on the Office Action's previous indications that claims 2 and 13 are directed towards allowable subject matter.

In response, the Examiner informed the Applicants' representative that she had spoken with her Supervisory Patent Examiner, SPE D. Payne, regarding the above amendments to the claims, and that SPE Payne had changed his mind and decided to retract the statement that claims 2 and 13 are directed to allowable subject matter.

The Applicants' representative asked for an explanation as to why SPE Payne changed his mind, and asked for a detailed explanation as to where the prior art reference to Li disclosed each feature of previous claims 2 and 13. By way of review, the features recited by previous claim 2 (incorporated into claim 1 above) are:

“...the plurality of reception quality data generated by the generator including first reception quality data in which the comparison result is expressed by bits in ascending order of subcarrier number of subcarriers constituting the multicarrier signal, and at least one of second reception quality data in which subcarrier numbers of subcarriers with reception quality greater than or equal to the threshold value are expressed by bits based on the comparison result and third reception quality data in which subcarrier numbers of subcarriers with reception quality less than the threshold value are expressed by bits based on the comparison result...(emphasis and numbers added)”

1. “first reception quality data”

The Applicants' representative began by asking the Examiner to cite a portion of Li which allegedly discloses the feature of “first reception quality data in which the comparison result is expressed by bits in ascending order of subcarrier number of subcarriers constituting the multicarrier signal.” The Examiner responded by alleging that paragraph [0054] of Li discloses this recited feature. Paragraph [0054] of Li discloses:

“The estimated SINR values may be ordered from largest to smallest SINRs and the clusters with large SINR values are selected. In one embodiment, the selected clusters have SINR values that are larger than the minimum SINR which still

allows a reliable (albeit low-rate) transmission supported by the system. The number of clusters selected may depend on the feedback bandwidth and the request transmission rate. In one embodiment, the subscriber always tries to send the information about as many clusters as possible from the base station chooses.”

The Applicants’ representative noted that this paragraph does not mention numerous features of the “first quality reception data,” including: (1) a “comparison result”, (2) “subcarriers,” or (3) expressing the comparison result “by bits in ascending order of subcarrier number of subcarriers.” The Examiner responded by alleging that Li’s disclosure of “estimated SINR values may be ordered from largest to smallest SINRs and the clusters with large SINR values are selected” reads on these three features, and further alleged that because Li uses OFDM technology, subcarriers are used.

The Applicants’ representative responded by explaining that paragraph [0054] of Li did not disclose a “comparison result,” and therefore clearly could not disclose expressing the comparison result “by bits in ascending order of subcarrier number of subcarriers,” as recited by previous claim 2.

No agreement was reached with respect to this issue.

2. “second reception quality data”

The Applicants’ representative next asked the Examiner to cite a portion of Li which allegedly discloses the feature of “second reception quality data in which subcarrier numbers of subcarriers with reception quality greater than or equal to the threshold value are expressed by bits based on the comparison result.” The Examiner responded by alleging that paragraph [0086] of Li discloses this recited feature. Paragraph [0086] of Li discloses the following:

“In one embodiment, a subscriber first selects the group with the best overall performance and then feedbacks the SINR information for the clusters in that group. The subscriber may order the groups based on their number of clusters for which the SINR is higher than a predefined threshold. By transmitting the SINR

of all the clusters in the group sequentially, only the group index, instead of all the cluster indices, needs to be transmitted. Thus, the feedback for each group generally contains two types of information: the group index and the SINR value of each cluster within the group. FIG. 7 illustrates an exemplary format for indicating a group-based cluster allocation. Referring to FIG. 7, a group ID, ID1, is followed by the SINR values for each of the clusters in the group. This can significantly reduce the feedback overhead.”

The Applicants’ representative pointed out that this paragraph fails to disclose numerous features of the “second quality reception data,” including (1) “comparison result,” (2) “subcarriers,” and (3) “subcarrier numbers of subcarriers with reception quality greater than or equal to the threshold value are expressed by bits based on the comparison result.” The Examiner responded by alleging that Li’s disclosure of “the subscriber may order the groups based on their number of clusters for which the SINR is higher than a predefined threshold” reads on each of these recited features of the “second quality reception data.”

In response, the Applicants’ representative emphasized that paragraph [0086] of Li simply does not disclose numerous features of the second quality reception data. The Applicants’ representative further explained that Li’s disclosure of ordering groups based on their number of clusters for which the SINR is higher than a predefined threshold is not the same as “subcarrier numbers of subcarriers with reception quality greater than or equal to the threshold value are expressed by bits based on the comparison result,” as recited within the “second reception quality data.”

No agreement was reached with respect to this issue.

3. “third reception quality data”

The Applicants’ representative next asked where Li allegedly discloses the feature of “third reception quality data in which subcarrier numbers of subcarriers with reception quality less than the threshold value are expressed by bits based on the comparison result.” The

Examiner responded that Li does not explicitly disclose this recited feature of previous claim 2. However, the Examiner argued that she and SPE Payne agreed that it would be “possible” for Li to use this third reception quality data, based on the rest of Li’s disclosure.

The Applicants’ representative responded by asking for clarification as to what was meant by the statement that it would be “possible” for Li to use this third reception quality data, and further noted that there is no legal basis to reject a claim based on this argument. The Applicants’ representative further noted that anticipation under 35 U.S.C. § 102 requires a single prior art reference to disclose, either expressly or inherently, each recited feature of the claim, and that since the Examiner acknowledges that the “third reception quality data” is not disclosed by Li, Li could not be used to reject amended claim 1 under § 102.

The Examiner agreed and noted that, if amended claim 1 is submitted, the rejection could not be made under § 102. The Examiner stated that if a rejection were made, it would be made under 35 U.S.C. § 103(a). In response, the Applicants’ representative asked for a basis for the § 103 rejection. The Examiner did not provide any clear explanation as to the basis.

No agreement was reached with respect to this issue.

As set forth above, Li does not teach or suggest each of the recited features of amended claim 1. It is well-established that “All words in a claim must be considered in judging the patentability of that claim against the prior art.” MPEP 2143.03. It is further well-established that the key to supporting any rejection under 35 U.S.C. § 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. MPEP 2142. Here, Li does not teach or suggest each of the recited features of claim 1. Furthermore, the Examiner’s unsupportable argument that Li renders claim 1 obvious simply based on “possible” uses of Li’s system is not a valid reason to reject claim 1.

Thus, it is respectfully submitted that Li fails to teach or suggest each of the recited features of claim 1, and that the rejection of claim 1 should be withdrawn for at least this reason. Independent claims 10, 11 and 17 similarly recite the above-mentioned subject matter distinguishing method claim 1 from the applied references, but claim 10 does so with respect to a radio communication terminal apparatus, claim 11 does so with respect to a base station apparatus, and claim 17 does so with respect to a subcarrier assignment method. Therefore, allowance of claims 1, 3-5, 10-11, and 14-17 is considered to be warranted.

In view of the above, it is submitted that this application is in condition for allowance and a notice to that effect is respectfully solicited.

If any issues remain which may best be resolved through a telephone communication, the Examiner is requested to telephone the undersigned at the local Washington, D.C. telephone number listed below.

Respectfully submitted,

/James Edward Ledbetter/

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JEL/DEA/att

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